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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,920

06/07/2005

Carl Towns

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2378

23416

7590

02/06/2009

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EXAMINER

YAMNITZKY, MARIE ROSE

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

02/06/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,920	Applicant(s) TOWNS ET AL.	
	Examiner Marie R. Yamnitzky	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-24 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

This communication is in response to applicant's request for reconsideration filed January 22, 2009. (The listing of claims filed with the request for reconsideration lists claim 6 as a "currently amended" claim, but the indicated change to claim 6 was made in the amendment filed August 01, 2008. The correct status identifier for claim 6 is "previously presented".)

Claims 1-24 are pending.

All of the rejections under 35 U.S.C. 103(a) as set forth in the Office action mailed October 22, 2009 are hereby withdrawn. Each of the prior art rejections relied on Becker et al. (WO 01/42331), either as a primary reference or a secondary reference, as disclosing repeat units having a structure encompassing the indenofluorene repeat unit structure required by the present claims. In applicant's response filed August 01, 2008, applicant stated that formula (III) of the Becker reference corresponded to formula (I) of present claim 1, but as correctly noted in the request for reconsideration filed January 22, 2009, Becker's formula (III) is actually different from the present formula (I) structure. The indenofluorene structure represented by Becker's formula (III) does not encompass the indenofluorene repeat units of formula (I) or the indenofluorene unit(s) required by any of the other pending claims.

The finality of the previous Office action is withdrawn. Prior to further examination of the claims, a restriction requirement is made as set forth on the following pages.

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Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-9, drawn to a polymer comprising repeat units of formula (I).

Group II, claim(s) 10 and 11, drawn to a monomer comprising a compound of formula (II).

Group III, claim(s) 12 and 13, drawn to a process of preparing a polymer using a monomer of formula (II).

Group IV, claim(s) 14, drawn to an organic light emitting device comprising a polymer comprising repeat units of formula (I).

Group V, claim(s) 15-19, drawn to a monomer comprising a unit of formula (III).

Group VI, claim(s) 20, drawn to a process of preparing a polymer using a monomer comprising a unit of formula (III).

Group VII, claim(s) 21, drawn to a switching device comprising a polymer comprising a first repeat unit of formula (I) and a second repeat unit selected from the group consisting of triarylamine and heteroaromatics.

Group VIII, claim(s) 22 and 23, drawn to a field effect transistor (claim 22) and integrated circuit comprising the field effect transistor (claim 23) wherein the transistor comprises a polymer comprising a repeat unit of formula (I).

Group IX, claim(s) 24, drawn to a photovoltaic cell comprising a polymer comprising a repeat unit of formula (I).

The inventions listed as Groups I-IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The feature in common to all the claims is the 5-fused rings of the indenofluorene structure. This feature does not represent a contribution over

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the prior art as this structure was known at the time of the invention as evidenced, for example, by Setayesh et al. in *J. Am. Chem. Soc.*, Vol. 123, No. 5, pp. 946-953, 2001 (of record). Note that the aryl or heteroaryl group substituent required for the formula (I) structure as defined in claim 1 is not part of the feature in common to all the claims since the indenofluorene structure in Groups V and VI do not require at least one aryl or heteroaryl group substituent. Even if the indenofluorene structure of all pending claims required at least one aryl or heteroaryl group substituent as required by the formula (I) structure, the substituted indenofluorene structure is not considered by the examiner to represent a contribution over the prior art since such structures are encompassed by prior art disclosures such as Stern et al. (US 5,856,434; e.g. see the first formula in col. 3 where n may be 0, and R^1 and/or R^2 may be aryl groups) or Frey et al. (US 2004/0178414 A1; e.g. see formula (IX) on page 3 wherein Z^2 and Z^3 may be $C(R^4)(R^5)$, and R^4 and/or R^5 may be aryl groups).

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained.

Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

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Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 7:00 a.m. to 3:30 p.m. Monday-Friday.

The current fax number for all official faxes is (571) 273-8300. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

/Marie R. Yamnitzky/
Primary Examiner, Art Unit 1794

MRY
February 04, 2009